

## Second Helpings

### Analog

### November, 1985

It was more habit than hobby, and it was certainly not anything acquired deliberately, with malice aforethought; nonetheless, it had undoubtedly been acquired. Haviland Tuf collected spacecraft.

Perhaps it is more accurate to say he accumulated spacecraft. He certainly had the room for them. When Tuf had first set foot upon the *Ark*, he had found there five black, rakish, delta-winged shuttles, the gutted hull of a big-bellied Rhiannese merchant, and three alien starships: a heavily-armed Hruun fighter and two much stranger craft whose histories and builders remained an enigma. To that ragtag fleet was added Tuf's own damaged trading vessel, the *Cornucopia of Excellent Goods at Low Prices*.

That was only the beginning. In his travels, Tuf found other ships gathering on his landing deck much as dust balls gather under a computer console and papers gather on a bureaucrat's desk.

On Freehaven, the negotiator's one-man driveshift courier had been so badly scored by enemy fire while running the blockade that Tuf had been obliged to provide return passage in the shuttle *Manticore*—after a contract had been arrived at, of course. Thus he had acquired one driveshift courier.

On Gonesh, the elephant priests had never actually seen an elephant. Tuf had cloned them a few herds, and for variety had thrown in a brace of mastodon, a woolly mammoth, and a green Trygian trumpet-tusker. The Goneshi, who wished no commerce with the rest of humanity, had paid his fee with the fleet of decrepit starships their colonizing ancestors had arrived in. Tuf had been able to sell two of the ships to museums and the rest of the fleet to a scrapyard, but he had kept one ship on a whim.

On Karaleo, he had bested the Lord of the Burnished Golden Pride in a drinking contest, and had won a luxurious lionboat for his troubles, although the loser had ingriciously removed most of the ornate solid-gold trim before handing it over.

The Artificers of Mhure, who were inordinately proud of their craftsmanship, had been so pleased by the clever dragonettes Tuf had provided to check their plague of wing-rats that they had given him an iron-and-silver dragon-shuttle with huge bat-wings.

The knights of St. Christopher, whose resort world had been robbed of much of its charm by the depredations of huge flying saurians they called dragons (partly for effect and partly due to a lack of imagination), had been similarly pleased when Tuf had provided them with georges, tiny hairless simians who loved nothing better than to feast on dragon eggs. So the knights had given him a ship as well. It looked like an egg—an egg built of stone and wood. Inside the yolk were deep padded seats of oiled dragon leather, a hundred fantastical brass levers, and a stained-glass mosaic where a viewscreen ought to be. The wooden walls were hung with rich hand-woven tapestries portraying great feats of chivalry. The ship didn't work, of course—the viewscreen didn't view, the brass levers did nothing, and the life support systems couldn't support life. Tuf accepted it nonetheless.

And so it had gone, a ship here and a ship there, until his landing deck looked like an interstellar junkyard. Thus it was, when Haviland Tuf determined to make his return to S'uthlam, that he had a wide variety of starships at his disposal.

He had long ago reached the conclusion that returning in the *Ark* itself would be unwise. After all, when he had left the S'uthlamese system, the Planetary Defense Flotilla had been in hot pursuit, determined to confiscate the seedship. The S'uthlamese were a highly advanced and technologically sophisticated people who would undoubtedly have made their warships faster and more dangerous in the five standard years since Tuf had last gone among them. Therefore, a scouting sortie was imperative. Fortunately,

Haviland Tuf considered himself a master of disguise.

He took the *Ark* out of drive in the cold, empty darkness of interstellar space a light-year from S'ulstar, and rode down to his landing deck to inspect his fleet. At length he decided upon the lionboat. It was large and swift, its star-drive and life-support systems were functional, and Karaleo was far enough removed from S'uthlam so that commerce between the two worlds was unlikely. Therefore any flaws in his imposture would most likely go unnoticed. Before he made his departure, Haviland Tuf dyed his milk-white skin a deep bronze color, covered his long hairless features with a wig that gave him a formidable red-gold beard and a wild mane, glued on fierce eyebrows, and draped his massive, paunchy frame in all manner of brightly colored furs (synthetic) and golden chains (quasigilt, actually) until he looked the very part of a Karaleo noble. Most of his cats remained safely behind upon the *Ark*, but Dax, the black telepathic kitten with the lambent golden eyes, rode with him, snug in one cavernous pocket. He gave his ship a likely and appropriate name, stocked it with freeze-dried mushroom stew and two kegs of thick brown St. Christopher Malt, programmed its computer with several of his favorite games, and set out.

When he emerged from drive into normal space near the globe of S'uthlam and its expansive orbital docks, Tuf was hailed at once. Upon the control chamber's huge telescreen—shaped like a large eye, another interesting affectation of the Leonese—appeared the features of a small, spare man with tired eyes. “This is Spiderhome Control, Port of S'uthlam,” he identified himself. “We have you, fly. ID, please.”

Haviland Tuf reached out and activated his comm unit. “This is *Ferocious Veldt Roarer*,” he said in an even, dispassionate voice. “I wish to secure docking permission.”

“What a surprise,” the controller said, with bored sarcasm. “Dock four-thirty-seven. Out.” His face was replaced by a schematic showing the location of the designated berth relative to the rest of the station. Then the transmission cut off.

A customs team came aboard after docking. One woman inspected his empty holds, ran a swift and cursory safety check to make sure this odd and unlikely craft was not going to explode or melt down or otherwise damage the web, and checked the ship over for vermin. Her companion subjected Tuf to a lengthy inquiry as to his point of origin, destination, business on S'uthlam, and other particulars of his voyage, punching his fictitious answers into a hand computer.

They were almost finished when Dax emerged sleepily from Tuf's pocket and peered at her. “What the...” she said, startled. She rose so suddenly she almost dropped her computer.

The kitten—well, he was almost a cat now, but still the youngest of Tuf's pets—had long, silky hair as black as the depths of space, bright golden eyes, and a curiously indolent manner. Tuf plucked him out, cradled him with one arm, stroked him with the other. “This is Dax,” he said. The S'uthlamese had a disconcerting habit of regarding all animals as vermin, and he was anxious to forestall any rash actions on the part of the customs official. “He is a pet, madam, and quite harmless.”

“I know what he is,” the woman said sharply. “Keep him away from me. If he goes for my throat, you're in big trouble, fly.”

“Indeed,” said Haviland Tuf. “I will do my best to control his ferocity.”

She looked relieved. “It's only a little cat, right? What's that called, a catling?”

“Your knowledge of zoology is astute,” Tuf replied.

“I don't know doodles about zoology,” the customs inspector said, settling herself back into her seat. “But I watch my vidshows from time to time.”

“No doubt you chanced to view an educational documentary, then,” Tuf said.

“Yawn,” the woman said. “Neg on that, fly. I'm more for romance and adventure vids.”

"I see," said Haviland Tuf. "And one such drama featured a feline, I assume."

She nodded, and just then her colleague emerged from the hold. "All clean," the other woman said. She spotted Dax, cradled in Tuf's arms, and smiled. "A cat vermin," she said happily. "Sort of cute, isn't it?" "Don't be fooled," the first inspector warned. "They're soft and cuddly but they can rip your lungs out in the blink of an eye."

"He looks a little small for that," her partner said.

"Ha! Remember the one in *Tuf and Mune*."

"*Tuf and Mune*," Haviland Tuf repeated, his voice without expression.

The second inspector sat down next to the first. "*The Pirate and the Portmaster*," she said.

"He was the ruthless lord of life and death, in a ship as large as the sun. She was the spider queen, torn between love and loyalty. Together they changed the world," the first said.

"You can rent it in Spiderhome if you like that sort of thing," the second told him. "It's got a cat in it."

"Indeed," said Haviland Tuf, blinking. Dax began to purr.

His berth was five kilometers out along the web, so Haviland Tuf caught a pneumatic tubetrain into port center.

He was jostled on every side. On the train there were no seats. He was forced to stand with a stranger's rude elbow thrust into his ribs, the cold plasteel mask of a cybertech mere millimeters from face, and the slick carapace of some alien rubbing up against his back whenever the train slowed. When he disembarked, it was as if the car had decided to vomit out the overabundance of humanity it had ingested. The platform was swarming chaos, noise, and confusion, with passers-by milling all about him. A short young woman with features as sharp as the blade of a stiletto laid an unwelcome hand on his furs and invited him to join her at a sex parlor. No sooner had Tuf disengaged himself than he faced a newsfeed reporter, equipped with third-eye camera and ingratiating smile, who said he was doing a feature on strange flies and wanted an interview.

Tuf pushed past him to a vending booth, purchased a privacy shield, and clipped it on his belt. That provided a certain minimal help. When they saw it, the S'uthlamese politely averted their eyes, in keeping with his wishes, and he was free to proceed through the throngs more or less unmolested.

His first stop was a vidplex. He engaged a private room with couch, ordered up a bulb of watery S'uthlamese beer, and rented a copy of *Tuf and Mune*.

His second stop was the Portmaster's office. "Sir," he said to the man behind the reception console, "a query, if you will. Does Tolly Mune yet serve as Portmaster of S'uthlam?"

The secretary looked him up and down and sighed. "Flies," he said, sighing. "Of course. Who else?"

"Who else indeed," said Haviland Tuf. "It is imperative that I meet with her at once."

"Is it now? You and a thousand others. Name?"

"I am named Weemowet, a traveller out of Karaleo, master of the *Ferocious Veldt Roarer*."

The secretary grimaced and entered that into the console, then slouched back on his floater chair, waiting. Finally he shook his head. "Sorry, Weemowet," he said. "Ma's busy and her computer's never heard of you, your ship, or your planet. I can get you an appointment in about a week, if you'll state your business."

"This is unsatisfactory. My business is of a personal nature, and I would prefer to see the Portmaster immediately."

The secretary shrugged. "Defecate or evacuate the chamber, fly. Best we can do."

Haviland Tuf reflected a moment. Then he reached up, grasped the fringe of his mane, and pulled. It made a ripping sound as it came off his face. "Observe!" he said. "I am not truly Weemowet. I am Haviland Tuf in disguise." He draped his mane and beard over the top of the console.

"Haviland Tuf?" the secretary said.

"Correct."

The man laughed. "I saw that vidshow, fly. If you're Tuf, I'm Stephan Cobalt Northstar."

"Stephan Cobalt Northstar has been dead for more than a millennium. Nonetheless, I am Haviland Tuf."

"You don't look a thing like him," the secretary said.

"I am incognito, disguised as a Leonese noble."

"Oh, right. I forgot."

"Your memory is short. Will you tell Portmaster Mune that Haviland Tuf has returned to S'uthlam and wishes to speak with her at once?"

"No," the man said bluntly, "but I'll be sure to tell all my friends tonight at the orgy."

"I have the sum of sixteen million five hundred thousand standards which I wish to pay over to her," Tuf said.

"Sixteen million five hundred thousand standards?" the secretary said, impressed. "That's a lot of money."

"You have a keen perception of the obvious," Tuf said evenly. "I have found ecological engineering to be quite a lucrative profession."

"Good for you," the man said. He leaned forward. "Well, Tuf or Weemowet or whoever you are, this all has been very droll, but I have work to do. If you don't pick up your hair and scuttle out of my sight in the next few seconds, I'm going to have to call security." He was about to expand on that theme when his console buzzed at him. "Yes?" he said into his headset, frowning. "Ah, yes. Sure, Ma. Well, big, very big, two and a half meters tall, gut on him that's almost obscene. Hmmm. No, lots of hair, or at least he did before he yanked it off and dumped it on my console. No. Says he's in disguise. Yes. Says he's got millions of standards for you."

"Sixteen million five hundred thousand," Tuf said with some precision.

The secretary swallowed. "Certainly. Right now, Ma." He broke the connection and looked up at Tuf with astonishment. "She wants to see you." He pointed. "Through that door. Careful, her office is zero gee."

"I am aware of the Portmaster's aversion to gravity," said Haviland Tuf. He gathered up his discarded mafta, tucked it under one arm, and moved with stiff dignity toward the indicated door, which slid open at his approach.

She was waiting in the inner office, floating in the center of the clutter, her legs crossed, her long silver-and-iron hair moving lazily about her lean, open, homely face like a wreath of smoke. "So you came back," she said when Tuf swam into view.

Haviland Tuf was uncomfortable in zero gee. He pulled himself to her visitor's chair, securely bolted to what should have been the floor, and strapped himself in. He folded his hands neatly atop the great curve of his stomach. His mane, abandoned, drifted about on the air currents. "Your secretary refused to relay my messages," he said. "How did you come to suspect that it was me?"

She grinned. "Who else would call his ship *Ferocious Veldt Roarer*?" she said. "Besides, it's been five years almost to the day. I had a feeling you'd be the punctual sort, Tuf."

“I see,” said Haviland Tuf. With deliberate dignity, he reached inside his synthafurs, broke the sealseam on the inner pocket, and extracted a vinyl wallet lined with crystal datachips in tiny pouches. “Herewith, madam, I am most pleased to tender you the sum of sixteen million five hundred thousand standards, in payment of the first half of my debt to the Port of S’uthlam for the restoration and refitting of the *Ark*. You will find the funds secure in appropriate financial depositories on Osiris, ShanDellor, Old Poseidon, Ptola, Lyss, and New Budapest. These chips will permit access.”

“Thanks,” she said. She took the wallet, flipped it open, glanced at it briefly, and let it loose. It floated up toward the mane. “Somehow I knew you’d find the standards, Tuf.”

“Your faith in my business acumen is reassuring,” said Haviland Tuf. “Now, concerning this vidshow.”

“*Tuf and Mune*? You’ve seen it, then?”

“Indeed,” said Tuf.

“Goddamn,” Tolly Mune said, grinning crookedly. “So what’d you think, Tuf?”

“I am forced to admit that it evoked a certain perverse fascination in me, for obvious reasons. The idea of such a drama has an undeniable appeal to my vanity, but the execution left much to be desired.”

Tolly Mune laughed. “What bothers you the most?”

Tuf raised a single long finger. “In a word, inaccuracy.”

She nodded. “Well, the vidshow Tuf masses about half what you do, I’d say, his face is a lot more mobile, his speech wasn’t half as stilted, and he had a spinneret’s musculature and an acrobat’s coordination, but they *did* shave his head in the interests of authenticity.”

“He wore a mustache,” said Haviland Tuf. “I do not.”

“They thought it looked roguish. Then again, look what they did to me. I don’t mind that they took fifty years off my age, and I don’t mind that they enhanced my face until I looked like a Vandeeni dream-princess, but those goddamned *breasts!*”

“No doubt they wished to emphasize the certainty of your mammalian evolution,” said Tuf. “These might be put down as minor alterations in the interests of presenting a more aesthetic entertainment, but I regard the wanton liberties taken with my opinions and philosophies to be a far more serious matter. In particular, I object to my final speech, wherein I opine that the genius of evolving humanity can and will solve all problems, and that eco-engineering has freed the S’uthlamese to multiply without fear or limit, and thus evolve to greatness and ultimate godhood. This is in utter contradiction to the actual views I expressed to you at the time, Portmaster Mune. If you will recall our conversations, I told you distinctly that any solution to your food problem, whether technological or ecological in nature, must of necessity be only a stopgap if your people continued to practice unrestrained reproduction.”

“You were the hero,” Tolly Mune said. “They couldn’t very well have you sound anti-life, could they?”

“Other flaws are also present in the narrative. Those unfortunate enough to view this fiction have received a wildly distorted view of the events of five years ago. Havoc is a harmless though spirited feline whose ancestors have been domesticated since the veritable dawn of human history, and it is my recollection that when you treacherously seized her on a legal technicality in a backhanded scheme to force me to hand over the *Ark*, she and I both tendered our surrender peacefully. At no point did she rip even a single security man apart with her claws, let alone six of them.”

“She did claw the back of my hand once,” said Tolly Mune. “Anything else?”

“I have nothing but approbation for the policies and conduct of Josen Rael and the High Council of S’uthlam,” Tuf said. “It is true that they, and particularly First Councillor Rael, behaved in an unethical and unscrupulous manner. Nonetheless, on their behalf, it must be said that at no point did Josen Rael subject me to torture, nor did he kill any of my cats in an effort to bend me to his will.”

“He didn’t sweat that much either,” said Tolly Mune, “and he *never* drooled. He was actually a decent man.” She sighed. “Poor Josen.”

“Finally we come to the crux of the matter. Crux indeed—a strange word when one rolls it upon the tongue, but quite appropriate to this discussion. The crux, Portmaster Mune, was and is the nature of our wager. When I brought the newly salvaged *Ark* in for refitting, your High Council resolved to have her. I refused to sell, and as you had no legal pretext for seizing the ship, you confiscated Havoc as vermin, and threatened to destroy her unless I thumbed a transfer. Is this correct in its essentials?”

“Sounds right to me,” Tolly Mune said amiably.

“We resolved the impasse with a wager. I would attempt to forestall S’uthlam’s food crisis via eco-engineering, thus averting the great famine that threatened you. If I failed, the *Ark* was yours. If I succeeded, you were to return Havoc and, moreover, perform the refitting and repairs that I required and allow me ten standard years to pay the resulting bill.”

“Right,” she said.

“To my best recollection, at no point was carnal knowledge of your body included in my terms, Portmaster Mune. I would be the last to diminish the bravura you displayed in adversity, when the High Council shut down the tubes and secured all the docks. You risked your person and career, smashed through a plasteel window, flew across kilometers of stark vacuum clad only in skinthins and propelled by airjets, dodged security squads all the way, and in the end barely avoided destruction by your own Planetary Defense Flotilla as they moved against me. Even one as plain and blunt as myself must admit that these acts possess a certain heroic, even romantic, quality that in ancient days might be the stuff of legends. However, the purpose of this melodramatic albeit daring voyage was to return Havoc to my custody, as per the terms of our agreement, and not to deliver up your body to my,” he blinked, “lusts. Furthermore, you made it perfectly clear at that time that your actions were motivated by a sense of honor and fear of the corrupting influence the *Ark* might have upon your leaders. As I recall, neither physical passion nor romantic love played any part in your calculations. “

Portmaster Tolly Mune grinned. “Look at us, Tuf. A damned unlikely pair of star-crossed lovers. But you’ve got to admit, it makes a better story.”

Tuf’s long face was still and expressionless. “Surely you do not defend this grossly inaccurate vidshow,” he said flatly.

The Portmaster laughed again. “Defend it? Puling hell, I *wrote* it!”

Haviland Tuf blinked six times.

Before he could frame a reply, the outer door slid open and the newsfeed peeps came swarming in, a good two dozen of them, yammering and exclaiming and shouting out rude questions. In the center of each forehead, a third eye whirred and blinked.

“This way, Tuffer. Smile.”

“Do you have any cats with you?”

“Will you be taking out a marriage contract, Portmaster?”

“Where’s the *Ark*?”

“Let’s have an embrace, hey!”

“When did you turn brown, trader?”

“Where’s the mustache?”

“Any opinion of *Tuf and Mune*, Citizen Tuf?”

“How’s Havoc these days?”

Strapped immobile into his chair, Haviland Tuf glanced up, down, and all around with a series of quick, precise head motions. He blinked and said nothing. The torrent of questions continued until Portmaster Tolly Mune came swimming effortlessly through the pack, pushing peeps aside with either hand, and settled down next to Tuf. She slid her arm through his and kissed him lightly on the cheek. "Puling hell," she said, "hold your goddamned bladders, he just got here." She raised a hand. "No questions, sorry. We're invoking privacy. It's been five years, after all. Give us some time to get reacquainted."

"Are you going off to the *Ark* together?" one of the more aggressive reporters asked. She was floating a half-meter in front of Tuf's face, her third eye whirring.

"Of course," said Tolly Mune. "Where else?"

It was not until the *Ferocious Veldt Roarer* was well out of the web, en route back to the *Ark*, that Haviland Tuf deigned to walk back to the cabin he had assigned to Tolly Mune. He was freshly showered, cleansed, and scrubbed, all traces of disguise removed. His long hairless face was as white and unreadable as blank paper. He wore a plain gray coverall that did little to conceal his formidable paunch, and a green duck-billed cap adorned with the golden theta of the Ecological Engineers covered his bald pate. Dax rode upon one broad shoulder.

Tolly Mune had been reclining and sipping on a bulb of St. Christopher Malt, but she grinned when he entered. "This is damn good stuff," she said. "Well now, who's that? Not Havoc."

"Havoc is safely back aboard the *Ark*, with her mate and her kittens, though in truth they can scarcely be said to be kittens any longer. The feline population of my ship has grown somewhat since my last call at S'uthlam, albeit not as precipitously as the human population of S'uthlam is wont to grow." He lowered himself stiffly into a seat. "This is Dax. While every cat is of course special, Dax might accurately be said to be extraordinary. All cats have a touch of psi; this is well known. Due to an unusual set of circumstances I encountered upon the world known as Namor, I initiated a program to enhance and expand upon this innate feline ability. Dax is the end result, madam. We share a certain rapport, and Dax is gifted with a psi ability that is far from rudimentary."

"In short," said Tolly Mune, "you cloned yourself a mindreading cat."

"Your perspicacity remains acute, Portmaster," Tuf replied. He folded his hands. "We have much to discuss. Perhaps you will be so kind as to explain why you have requested that I bring the *Ark* back to S'uthlam, why you have insisted on accompanying me, and most crucially why you have embroiled me in this strange though colorful deception, and even gone so far as to make free with my person?"

Tolly Mune signed. "Tuf, you remember how things stood when we parted five years ago?"

"My memory is unimpaired," said Haviland Tuf.

"Good. Then you might recall that you left me in a real puling mess."

"You anticipated immediate removal from your post as Portmaster, trial on charges of high treason, and a sentence to a penal farm on the Larder," said Tuf. "Nonetheless, you declined my effort to provide you with free transport to another system of your choice, preferring instead to return to face imprisonment and disgrace."

"Whatever the hell I am, I'm S'uthlamese," she said. "These are my people, Tuf. Big puling fools at times, but still my goddamned people."

"Your loyalty is no doubt commendable. Since you are still Portmaster, I must assume that circumstances changed."

"I changed them," Tolly Mune said.

"Indeed."

“Had to, if I didn’t want to spend the rest of my life driving a weeder-wheel through the neoglass while gravity pulled me apart.” She made a face. “As soon as I got back to port, security grabbed me. I’d defied the High Council, broken laws, damaged property, and helped you escape with a ship they wanted to confiscate. Damned dramatic, wouldn’t you say?”

“My opinion has no bearing on the matter.”

“So dramatic, in fact, that it had to be either a crime of enormous magnitude or an act of enormous heroism. Josen was sick about it. We went way back, him and me, and he wasn’t a bad man really, I told you that. But he was First Councillor, and he knew what he had to do. He had to try me for treason. And I’m no damned fool either, Tuf. I knew what I had to do.” She leaned forward. “I wasn’t that pleased by my cards either, but I had to play them or fold. To save my bony ass, I had to destroy Josen—discredit him and most of the High Council. I had to make myself a heroine and him a villain, in terms that would be perfectly clear to every goddamned drooling slackjaw in the undercity.”

“I see,” said Tuf. Dax was purring; the Portmaster was perfectly sincere. “Ergo the overblown melodrama that was called *Tuf and Mune*.”

“I needed calcs for legal costs,” she said. “That was real enough, puling hell, but I used it as an excuse to sell my version of events to one of the big vidnets. I, let us say, seasoned the story a bit. They were so excited they decided to follow the newsfeed exclusive with a dramatized version. I was more than happy to provide the script. Had a collaborator, of course, but I told him what to write. Josen never understood what was happening. He wasn’t as canny a pol as he thought, and his heart was never in it. Besides, I had help.”

“From what source?” Tuf inquired.

“A young man named Cregor Blaxon, mostly.”

“The name is unknown to me.”

“He was on the High Council. Councillor for agriculture. A very crucial post, Tuf, and Blaxon was the youngest man ever to fill it. Youngest man on the Council, too. You’d think he’d be satisfied, right?”

“Please do not presume to tell me my thoughts, unless you have developed psionic abilities in my absence. I would think no such thing, madam. I have found that it is almost always a mistake to assume that any human being is ever satisfied.”

“Cregor Blaxon is and was a very ambitious man,” Tolly Mune said. “He was part of Josen’s administration. Both of them were technocrats, but Blaxon aspired to the First Councillor’s seat and that was where Josen Rael had planted his buttocks.”

“I grasp his motivation.”

“Blaxon became my ally. He was quite impressed with what you’d provided anyway. The omni-grain, the fish and that plankton, the slime-molds, all the damn mushrooms. And he saw what was happening. He used every bit of his power to cut short bio-testing and put your stuff in the field. Screamer priorities all around. Did a smash-run on any puling fool tried to slow things down. Josen Rael was too preoccupied to notice.”

“The intelligent and efficient politician is a species virtually unknown in the galaxy,” said Haviland Tuf. “Perhaps I might secure a scraping from Cregor Blaxon for the *Ark*’s cell library.”

“You’re getting ahead of me.”

“The end of the story is obvious. The appearance of vanity notwithstanding, I will venture a guess that my small effort at eco-engineering was deemed a success, and that Cregor Blaxon’s energetic implementation of my solutions rebounded to his credit.”

“He called it Tuf’s Flowering,” Tolly Mune said with a certain cynical twist to the corner of her mouth.



“The newsfeeds took up the term. Tuf’s Flowering, a new golden age for S’uthlam. Soon we had edible fungus growing along the walls of our sewer systems. We started huge mushroom farms in every undercity. Carpets of neptune’s shawl crept across the surface of our seas, and underneath, your fish multiplied at an astounding rate. We planted your omni-grain instead of neograss and nanowheat, and the first crop gave us almost triple the caloric yield. You did one nova-class job of eco-engineering for us, Tuf.”

“The compliment is noted with due appreciation,” said Tuf.

“Fortunately for me, the Flowering was already in full bud when *Tuf and Mune* hit the nets, long before I went to trial. Creg was extolling your brilliance to the newsfeeds daily and telling billions that our food crisis was done, finished, over.” The Portmaster shrugged. “So he made you a hero, for his own reasons. Couldn’t help it, if he wanted to replace Josen. And that helped make me a heroine. It all ties together in one big neat puling knot—prettiest goddamned thing you’d ever want to see. I’ll spare you the details. The end of it was, Tolly Mune acquitted, restored to office in triumph. Josen Rael in disgrace, denounced by all the opinionaters, forced to resign. Half the High Council resigned with him. Cregor Blaxon became the new technocratic leader and won the elections that followed. Creg’s now First Councillor. Josen, poor soul, died two years ago. And you and I have become the stuff of legends, Tuf, the most celebrated lovers since, oh, puling hell, since all those famous romantic couples from ancient times—you know, Romeo and Juliet, Samson and Delilah, Sodom and Gomorrah, Marx and Lenin.”

Perched on Tuf’s shoulder, Dax began to emit a low, frightened growl. Tiny claws dug through the fabric of Tuf’s jumpsuit into his flesh. Haviland Tuf blinked, then reached over and stroked the kitten soothingly. “Portmaster Mune, your smile is broad and your news seems to indicate nothing but the trite yet nonetheless eternally popular happy ending, but Dax has grown alarmed, as if you seethe with turmoil beneath this placid surface. Perhaps, you are omitting some crucial part of the tale.”

“Just the footnote, Tuf,” the Portmaster said.

“Indeed. What might that be?”

“Twenty-seven years, Tuf. Does that trip any claxons in your head?”

“Indeed. Before I embarked upon my program of ecological engineering, your projections indicated S’uth-lam to be twenty-seven standard years from mass famine, given the alarming population growth and the declining food resources.”

“That was five years ago,” said Tolly Mune.

“Indeed.”

“Twenty-seven minus five.”

“Twenty-two,” said Tuf. “I assume there is a point in this exercise in elementary arithmetic.”

“Twenty-two years left,” Portmaster Tolly Mune said. “Ah, but that was before the *Ark*, before the genius ecologist Tuf and the daring spinneret Mune fixed it all, before the miracle of the loaves and fishes, before courageous young Cregor Blaxon ushered in Tuf’s Flowering.”

Haviland Tuf turned his head to look at the cat on his shoulder. “I detect a certain note of sarcasm in her voice,” he said to Dax.

Tolly Mune sighed, reached into a pocket, and extracted a case of crystalline data-chips. “Here you go, lover,” she said. She tossed them through the air.

Tuf reached up, caught the spinning case in a large white hand, said nothing.

“Everything you need is there. Straight from the council databanks. The hard-classified files, of course. All the reports, all the projections, all the analyses, and it’s for your eyes only. You understand? That’s why I was so puling mysterious and that’s why we’re heading back to the *Ark*. Creg and the High

Council figured our romance made a terrific cover. Let the billions of newsfeed viewers think we're sexing up a storm. As long as their heads are full of visions of the pirate and Portmaster blazing new sexual frontiers, they won't stop to ponder what we're really up to, and everything can be done quietly. We want loaves and fishes, Tuf, but this time on a covered platter, you understand? Those are my instructions."

"What is the most recent projection?" said Haviland Tuf, his voice even and expressionless.

Dax stood up, hissing in alarm, and sudden fear.

Tolly Mune sipped on her beer, and slumped back deep into her chair. She closed her eyes. "Eighteen years," she said. She looked like the hundred-year-old woman she was, instead of a youngster of sixty, and her voice was infinitely weary. "Eighteen years," she repeated, "and counting."

Tolly Mune was far from unsophisticated. Having spent her life on S'uthlam, with its vast continent-wide cities, its teeming billions, its towers rising ten kays into the sky, its deep underways far below the surface, and its great orbital elevator, she was not a woman easily impressed by mere size. But there was something about the *Ark*, she thought.

She felt it from the moment of their arrival, as the great dome of the landing deck cracked open beneath them and Tuf took the *Ferocious Veldt Roarer* down into darkness and settled it among his shuttles and junked starships, upon a circular landing pad that glowed a dim blue in welcome. The dome closed over them and atmosphere was pumped back in; to fill so large a space so quickly it came with gale force, howling and sighing all around them. Finally Tuf opened their locks and preceded her down an ornate stair that slid from the lionboat's mouth like a gilded tongue. Below, a small three-wheeled cart was waiting. Tuf drove past the clutter of dead and abandoned ships, some more alien than any Tolly Mune had ever seen. He drove in silence, looking neither right nor left, Dax a limp, boneless, purring ball of fur stretched across his knees.

Tuf gave her an entire deck to herself. Hundreds of sleeping berths, computer stations, labs, accessways, sanitary stations, recreation halls, kitchens, and no tenants but her. On S'uthlam, a cityspace this large would have housed a thousand people, in apartments smaller than the *Ark*'s storage closets. Tuf turned off the gravity grid on that level, since he knew she preferred zero-gee.

"If you have need of me, you will find my own quarters on the top deck, under full gravity," he told her. "I intend to address all my energies to the problems of S'uthlam. I will not require your counsel or assistance. No offense is intended, Portmaster, but it has been my bitter experience that such liaisons are more trouble than they are worth and serve only to distract me. If there is an answer to your most vexing quandary, I shall arrive at it soonest by my own efforts, left undisturbed. I shall program a leisurely voyage toward S'uthlam and its web; it is my hope that when we arrive I will be able to solve your difficulty."

"If you can't," she reminded him sharply, "we get the ship. Those were the terms."

"I am fully aware of this," said Haviland Tuf. "In the event you grow restive, the *Ark* offers a full spectrum of diversions, entertainments, and occupations. Feel free to avail yourself to the automated food facilities as well. The fare so provided is not equal to the meals I prepare personally, though it will acquit itself admirably when compared to typical S'uthlamese provender, I have no doubt. Partake of as many meals as you require during the day; I will be pleased to have you join me each evening for dinner at eighteen-hundred ship's time. Kindly be punctual." And so saying, he took his leave.

The computer system that ran the great ship observed cycles of light and darkness, to simulate the passage of day and night. Tolly Mune spent her nights before a holo monitor, viewing dramas several millennia old recorded upon worlds half-legendary. Her days she spent exploring—first the deck that Tuf had ceded her, and then the rest of the ship. The more she saw and learned, the more awed and uneasy

Tolly Mune became.

She sat for days in the old captain's chair on the tower ridge that Tuf had bypassed as inconvenient, watching random selections from the ancient log roll down the great vidscreen.

She walked a labyrinth of decks and corridors, found three skeletons in scattered parts of the *Ark* (only two of them human), wondered at one corridor intersection where the thick duralloy bulkheads were blistered and cracked, as if by great heat.

She spent hours in a library she discovered, touching and handling old books, some printed on thin leaves of metal or plastic, others on real paper.

She returned to the landing deck and climbed around a few of the derelict starships Tuf had there. She stood in the armory and gazed on a frightening array of weapons, some of them obsolete, some of them unrecognizable, some of them forbidden.

She wandered down the dim vastness of the central shaft that cored the ship, walked the full thirty kays of its length, her bootsteps echoing overhead, her breath coming hard by the end of her daily treks. Around her were cloning vats, growth tanks, microsurgeries, and computer stations in staggering profusion. Ninety percent of the vats were empty, but here and there the Portmaster found life growing. She peered through dusty glass and thick, translucent fluids at dim, living shapes, shapes as small as her hand, and shapes as large as a tubetrain. It made her feel cold.

In fact, the whole ship seemed chilly and somehow frightening to Tolly Mune.

The only real warmth was to be found on the tiny portion of the top deck where Haviland Tuf spent his nights and days. The long, narrow communications room he had refitted as his central control was cozy and comfortable. His quarters were crowded with worn, overstuffed furniture and an amazing assortment of bric-a-brac accumulated in his voyagings. The smell of food and beer permeated the air here, bootsteps did not echo so, and there was light and noise and life. And cats.

Tuf's cats had free run of most of the ship, but most of them seemed to prefer to stay close to Tuf himself. He had seven now. Chaos, a long-haired gray tom with imperious eyes and an indolent, dominating manner, was the lord of all he surveyed. He could most often be found sitting on top of Tuf's master console in the control chamber, his bushy tail twitching like a metronome. Havoc had lost energy and gained weight in five years. She did not seem to recognize the Portmaster at first, but after a few days the old familiarity returned, and Havoc took up the acquaintance where it had dropped, and sometimes even accompanied Tolly on her wanderings.

Then there were Ingratitude, Doubt, Hostility, and Suspicion. "The kittens," Tuf called them, though they were really young cats now, "born of Chaos and Havoc, madam. Originally they comprised a litter of five. I left Foolishness behind on Namor."

"It's always best to leave foolishness behind," she said. "I never figured you to part with a cat, though."

"Foolishness developed an inexplicable fondness for a vexing and unpredictable young woman of Namorian origin," he said. "Since I had many cats and she had none, it seemed the appropriate gesture under the circumstances. Although the feline is a splendid and admirable creature, it remains relatively scarce in this sad modern galaxy. Thus my innate generosity and sense of duty to my fellow humans prompt me to offer cats to worlds such as Namor. A culture with cats is richer and more humane than one deprived of their unique companionship."

"Right," said Tolly Mune, smiling. Hostility was near at hand. She scooped him up carefully, stroked him. His fur was very soft. "Strange names you gave this lot."

"Perhaps more apt to human nature than to the feline," Tuf agreed. "I bestowed them on a whim."

Ingratitude, Doubt, and Suspicion were gray, like their father; Hostility was black and white like Havoc. Doubt was noisy and fat, Hostility was aggressive and rambunctious, Suspicion was shy and liked to hide

under Tuf's chair. They liked to play together, a boisterous cat pack, and seemed to find Tolly Mune endlessly fascinating, climbing all over her whenever she paid Tuf a visit. Sometimes they turned up in the least likely places. Hostility landed on her back one day as she ascended an escalator, and the surprise left her breathless and shocked. She grew accustomed to having Doubt in her lap during meals, begging slivers of food.

And then there was the seventh cat: Dax.

Dax, with fur the color of night and eyes like small golden lamps. Dax, the single most lethargic vermin she had ever seen, who preferred being carried to walking. Dax, who peered from Tuf's pocket, or out from beneath his cap, who sat on his knees or rode on his shoulder. Dax; who never played with the older kittens, who seldom made a sound, whose golden glance could somehow displace even huge, lordly Chaos from a chair both of them coveted. The black kitten was with Tuf constantly. "Your familiar," Tolly Mune said to him one mealtime, after she had been aboard for nearly twenty days. She pointed a knife. "That makes you a...what was the term?"

"There were several," Tuf said. "Witch, wizard, warlock. The nomenclature derives from Old Earth myth, I believe."

"It fits," said Tolly Mune. "Sometimes I feel this ship is haunted."

"This suggests why it is wiser to rely upon intellect rather than feelings, Portmaster. Accept my assurance that if ghosts or other supernatural entities did in fact exist, they would be represented aboard the *Ark* by cell samples, in order that they might be cloned. I have never encountered such samples. My stock in trade does include species sometimes referred to as hooded draculas, wind-wraiths, lycanthropes, vampires, garghoulis, witchweed, and other such terms, but these are not the genuine mythic articles, I fear."

Tolly Mune smiled. "Good thing."

"More wine, perhaps? It is an excellent Rhiannese vintage."

"That's one good idea," she said, splashing some into her glass. She still would have preferred a squeeze bulb; open liquids were sneaky things always waiting to spill. "My throat's dry anyway. You don't need monsters, Tuf. This ship of yours could destroy worlds as it is."

"This is obvious," said Tuf. "Equally obvious, it can save worlds."

"Like ours? You have a second miracle up your sleeve, Tuf?"

"Alas, miracles are as mystic as ghosts and goblins, and there is nothing up my sleeves but my arms. However, the human intellect is still capable of certain less-than-miraculous breakthroughs." He rose slowly to his full height. "If you are quite finished with your pop-onion pie and wine, perhaps you will accompany me to the computer room. I have applied myself diligently to your problems and have arrived at a few conclusions."

Tolly Mune got up quickly. "Lead on," she said.

"Note," said Haviland Tuf. He pressed a command key; a projection flashed upon one of the screens.

"What's this?" asked Molly Tune.

"The projection I made five years ago," he said. Dax hopped into his lap; Tuf reached out and stroked the black kitten. "The parameters used were the then-current S'uthlamese population figures and the projected population growth, as of that time. My analysis indicated that the additional food resources introduced into your society by means of what Cregor Blaxon was so kind as to dub Tuf's Flowering should have given you at minimum ninety-four standard years before the specter of planetary famine again threatened S'uthlam."

"Well, that's one goddamned projection that wasn't worth a pot of vermin," Tolly Mune said bluntly.

Tuf raised a finger. "A more volatile man than myself might take umbrage at the implication that his analysis was defective. Fortunately, I am of a cool and tolerant nature. Nonetheless, you are most incorrect, Portmaster Mune. My projections were as accurate as they could possibly have been."

"Then you're saying that we *don't* have starvation and collapse staring down at us eighteen years in the future? That we've got, what, almost a century?" She shook her head. "I'd like to believe that, but—"

"I said no such thing, Portmaster. Within its prescribed margin of error, the latest S'uthlamese projection also appears to be quite accurate insofar as I have been able to determine."

"Both projections can't be correct," she said. "That's impossible, Tuf."

"You are wrong, madam. During the intervening five years, the parameters changed. Attend." He reached out and depressed another button. A new line, rising sharply, curved across the screen. "This represents the present curve of population increase on S'uthlam. Note how it climbs, Portmaster. An astonishing rate of ascent. Were I of a poetic turn of mind, I might even say it soars. Fortunately, I am not so afflicted. I am a blunt man who speaks bluntly." He raised a finger. "Before we can hope to rectify your situation, it is necessary to understand that situation and how it came to be. Here all is clarity. Five years ago, I employed the resources of the *Ark*, and, if I may be so bold as to put my accustomed modesty aside, tendered to you extraordinarily efficient service. The S'uthlamese wasted no time in undoing everything I had done. Let me put it succinctly, Portmaster. No sooner had the Flowering taken root, so to speak, than your people rushed back to their private chambers, unleashed their carnal lusts and parental urges, and began reproducing faster than ever. Mean family size is greater now than five years ago, by .0072 persons, and your average citizen becomes a parent sooner by .0102 years. Small changes, you may protest, but when factored into the enormous base population of your world, and modified by all other relevant parameters, they make a dramatic difference. The difference, to be precise, between ninety-four years and eighteen."

Tolly Mune stared at the lines crossing upon the screen. "Puling hell," she muttered. "I should have figured, goddamn it. This sort of information is classified, for obvious reasons, but I should have known." Her hands clenched into fists. "Goddamn it to hell," she said. "Creg made such a newsfeed carnival out of the goddamned Flowering, no wonder this is happening. Why should anyone refrain from birthing—the food problem has been solved, right? The goddamned First Councillor said so. Good times had arrived, right? All the damned zeros had turned out to be puling anti-life alarmists once more, the technocrats had worked another miracle. How could anyone doubt that they'd do it again, and again, and again? Oh, yes. So be a good church member, have more kids, help humanity evolve to godhood and defeat entropy. Hey, why not?" She made a disgusted noise. "Tuf, why are people such puling idiots?"

"This quandary is even more perplexing than the dilemma that is S'uthlam," said Tuf, "and I fear I am not equipped to answer it. So long as you are engaged in the division of blame, you might also assign some to yourself, Portmaster. Whatever misleading impression might have been given by First Councillor Cregor Blaxon was most certainly confirmed in the popular mind by that unfortunate final oration delivered by my impersonator in *Tuf and Mune*."

"All right, damn it. I'm guilty, I helped gnarl it up. That's past now. The question is, what can we do about it?"

"You can do little, I fear," said Haviland Tuf, his face expressionless.

"And you? You worked the loaves and fishes miracle once. Can we get a second helping, Tuf?"

Haviland Tuf blinked. "I am a more experienced ecological engineer now than when I first attempted to deal with the problem of S'uthlam. I am more familiar with the full range of species contained within the *Ark's* cell library, and the effect of each upon individual ecosystems. I have even increased my stock in trade to a certain extent during the course of my travels hither and yon. Indeed, I can be of service." He cleared the screens and folded his hands atop his stomach. "There will be a price."

“A price? We paid your damn price, remember? My spinnerets fixed your goddamned ship.”

“Indeed they did, even as I repaired your ecology. I do not require any further repairs or refitting of the *Ark* at this time. You, however, appear to have damaged your ecology once again so you have further need of my services. It strikes me as only equitable that I be compensated for my efforts. I have many operating expenses, chief among which is my still-formidable debt to the Port of S’uthlam. By dint of exhausting and unremitting labor on numerous scattered worlds, I have raised the first half of the thirty-three million standards you assessed me, but an equal amount remains to be paid, and I have but five additional years to earn it. How can I say if this will be possible? Perhaps the next dozen worlds on which I call will have ecologies without blemish, or will be so impoverished that I will be forced to grant them severe discounts if I am to serve them at all. Day and night the size of my debt preys upon my mind, often interfering with the clarity and precision of my thoughts and thus making me less effective at my profession. Indeed, I have a sudden hunch that when wrestling with a challenge of the vast magnitude of that posed by S’uthlam, my performance might be far superior were my mind to be clear and untroubled.”

Tolly Mune had expected something like this. She had told Creg as much, and he’d given her limited budgetary discretion. Still, she managed a frown. “How much do you want, Tuf?”

“The sum of ten million standards leaps to mind,” he said. “Being a round number, it might be deducted from my bill easily without posing any knotty problems of arithmetic.”

“Too damn much,” she said. “Maybe I could get the High Council to agree to lop off, say, two million. No more.”

“Let us compromise on nine million,” said Tuf. A long finger scratched Dax behind a small black ear; the cat silently turned its golden eyes on Tolly Mune.

“Nine isn’t much of a compromise between ten and two,” she said drily.

“I am a better ecological engineer than mathematician,” said Tuf. “Perhaps eight?”

“Four. No more. Cregor will implode on me as it is.”

Tuf fixed her with an unblinking stare, and said nothing. His face was cool and still and impassive.

“Four and a half million,” she said under the weight of his gaze. She felt Dax staring, too, and suddenly wondered if that damn cat was reading her mind. She pointed. “Damn it,” she said, “that little black bastard knows just how high I’m authorized to go, doesn’t he?”

“An interesting notion,” said Tuf. “Seven million might be acceptable to me. I am in a generous mood.”

“Five and one-half,” she snapped. What was the use?

Dax began to purr loudly.

“Leaving a net principal of eleven million standards to be paid within five years,” said Tuf. “Accepted, Portmaster Mune, with one additional proviso.”

“What’s that?” she said suspiciously.

“I will present my solution to First Councillor Cregor Blaxon and yourself at a public conference, to be attended by newsfeed peeps from all of your vidnets, and broadcast live over the entirety of S’uthlam.”

Tolly Mune laughed aloud. “Incredible,” she said. “Creg will never agree. You can forget that idea.”

Haviland Tuf sat petting Dax, and said nothing.

“Tuf, you don’t understand the difficulties. The situation is too damned volatile. You’ll have to give on this one.”

The silence lingered.

“Puling hell,” she swore. “Tell you what, write down what you want to say, and let us look it over. If you

avoid anything that might stir up problems, I suppose we can give you access.”

“I prefer that my remarks be spontaneous,” Tuf said.

“Maybe we can record the conference and broadcast it after editing,” she said.

Haviland Tuf kept silent. Dax stared at her, unblinking.

Tolly Mune looked deep into those knowing golden eyes, and sighed. “You win,” she said. “Cregor will be furious, but I’m a puling heroine and you’re a returning conqueror, I suppose I can cram it down his gullet. But why, Tuf?”

“A whim,” said Haviland Tuf. “I am often taken by such fancies. Perhaps I wish to savor a moment in the light of publicity and enjoy my role as savior. Perhaps I wish to show the S’uthlamese billions that I do not wear a mustache.”

“I’ll believe in goblins and ghouls before I pay one standard for that load of ore,” said Tolly Mune. “Tuf, there are reasons why our population size and the gravity of the food crisis are kept secret, you know. Policy reasons. Now, you wouldn’t be thinking about, ah, opening that particular box of vermin, would you?”

“An interesting concept,” Tuf said, blinking, his face blank and noncommittal.

Dax purred.

“Unaccustomed as I am to public speaking and the unflattering glare of publicity,” Haviland Tuf began, “I felt it incumbent upon myself to come before you and explain certain things.”

He stood before a four-meter-square telescreen in the largest hall in Spiderhome, with a seating capacity for almost a thousand. The room was packed; newsfeed reporters were jammed in elbow-to-elbow up front, twenty rows of them, a tiny miniaturized camera in the center of each forehead busily recording the scene. Farther back were the curious who had come to watch—spinnerets of all ages, sexes, and professions, from cybertechs and bureaucrats to eroticists and poets, wealthy groundworms who had come up the elevator for the show, flies from distant systems passing through the web. On the platform with Tuf were Portmaster Tolly Mune and First Councillor Cregor Blaxon. Blaxon’s smile looked forced; perhaps he was recalling how the newsfeed peeps had all captured the long, awkward moment when Tuf blinked at his proffered hand. For that matter, Tolly Mune looked a bit uneasy.

Haviland Tuf, however, looked impressive. He loomed over every man and woman in the hall, his gray vinyl greatcoat sweeping the floor, the sigil of the EEC upon his green billed cap.

“First,” he said, “permit me to point out that I do not wear a mustache.” The statement provoked general laughter. “Nor have your esteemed Portmaster and myself ever united in physical congress, vidshows notwithstanding, though I have no reason to doubt that she is a skillful practitioner of the erotic arts whose favors would be held in high esteem by any who enjoy that sort of diversion.” The horde of newspeeps, like one clamorous hundred-headed beast, turned and fixed their third eyes upon Tolly Mune. The Portmaster was slumped deep in her seat, with a hand rubbing her temples. Her sigh was audible as far as the fourth row.

“These points of information are minor in nature,” said Tuf, “and are advanced solely in the interest of veracity. The major reason that I have insisted upon this gathering is professional rather than personal, however. I have no doubt that each of you listening to this newsfeed is aware of the phenomenon that your High Council called Tuf’s Flowering.”

Cregor Blaxon smiled and nodded his head.

“I must presume, however, that you are unaware of the imminence of what I will be so bold as to call S’uthlam’s Wilting.”

The First Councillor's smile wilted, too, and Portmaster Tolly Mune winced. The newspeeps swung back to Tuf en masse.

"You are indeed fortunate that I am a man who honors his debts and obligations, since my timely return to S'uthlam has allowed me to intervene once more in your behalf. Your leaders have been less than frank with you. But for the aid I am about to render you, your world would face starvation within the short span of eighteen standard years."

A moment of stunned silence occurred. Then a small riot began in the rear of the hall. Several people were forcibly ejected. Tuf paid the incident no mind.

"On my last visit, the program of ecological engineering I initiated produced dramatic increases in your food supply, through relatively conventional means, to wit, the introduction of new plant and animal species designed to maximize your agricultural productivity without seriously altering your ecology. Further efforts in this direction are undoubtedly possible, but I fear that the point of diminishing returns has long been passed, and such schemes would avail you little. Accordingly, this time I have accepted as fundamental the need to make radical alterations in your ecosystem and food chain. Some of you will find my suggestions unpleasant. I assure you that the other options you face—to wit, famine, plague, and war—are even more disagreeable.

"The choice, of course, remains yours, and I would not dream of making it for you."

The room was as cold as a cryonic storage facility, and deathly silent but for the whirring of the massed third eyes. Haviland Tuf raised a finger. "First," he said. Behind him an image filled the telescreen, broadcast directly from the *Ark*'s computers—the image of a swollen monstrosity as big as a hill, its skin oily and glistening, its bulk shimmering like opaque pink gelatin. "The meatbeast," said Haviland Tuf. "A significant portion of your agricultural land is devoted to the raising of herds of meat animals of various sorts, whose flesh is the delectation of a very small, wealthy minority of S'uthlamese who can afford such luxury and enjoy eating cooked animal matter. This is extremely inefficient. These beasts consume far more calories than they yield after slaughter, and being themselves the product of natural evolution, much of their body mass is inedible. I therefore suggest you eliminate these species from your world's ecosystem immediately.

"The meatbeasts, as depicted, are among the most notable triumphs of genetic tailoring; except for a small nucleus, these creatures are ever-replicating masses of undifferentiated cells, with no body mass wasted on nonessentials like sensory organs, nerves, or mobility. If one chose to employ metaphor, one might liken them to giant edible cancers. The flesh of the meatbeast contains all essential human nutrients and is high in protein, vitamins, and minerals. One adult meatbeast, growing in the basement of a S'uthlamese apartment tower, will yield as much edible flesh in a standard year as two of your present herds, and the grasslands now employed to raise these herds would be freed for agricultural cultivation."

"How do the damn things taste?" someone shouted out from the back of the room.

Haviland Tuf's head moved slightly, and he looked directly at the speaker. "As I am not myself an eater of animal flesh, I cannot answer that question from personal authority. I imagine, however, that meatbeast would taste very good to any starving man." He raised a hand, palm outward. "Let us proceed," he said, and the picture behind him changed. Now the telescreen showed an endless flat plain under a double sun. The plain was filled from horizon to horizon with plants—ugly looking things as tall as Tuf himself, their stalks and leaves an oily black, their heads drooping beneath the weight of swollen whitish pods that dripped a pale thick fluid.

"These, for reasons unknown to me, are called jersee-pods," said Tuf. "Five years ago, I gave you omni-grain, whose caloric yield per square meter is dramatically higher than that of nanowheat, neograss, and the other grains you had hitherto been planting. I note that you have sowed omni-grain extensively and reaped the benefits thereof. I also note that you have continued to plant nanowheat, neograss, spicepods, smackles, and numerous other types of fruit and vegetables, no doubt for the sake of variety



and culinary pleasure. This must cease. Culinary variety is a luxury the S'uthlamese can no longer afford. Caloric efficiency alone must henceforth be your byword. Every square meter of agricultural land on S'uthlam and your so-called Larder asteroids must immediately be turned over to jersee-pods."

"What kind of gunk is that dripping there?" someone called.

"Is that thing a fruit or a vegetable?" a newspeep demanded to know.

"Can you make bread from it?" another asked.

"The jersee-pod," said Tuf, "is inedible."

A sudden clamorous uproar swept over the room, as a hundred people shouted and waved and threw questions and began speeches.

Haviland Tuf waited calmly until there was silence. "Each year," he said, "as your First Councillor could tell you, were he only so inclined, your agricultural lands yield an ever-diminishing percentage of the caloric needs of the swelling S'uthlamese population, the difference being made up by increased production from your food factories, where petrochemicals are processed into nutritious wafers and paste and clever synthetic edibles. Alas, however, petroleum is a nonrenewable resource, and you are running out. This process may be delayed, but ultimately it is inexorable. No doubt you are importing some from other worlds, but that interstellar pipeline can yield you only so much. Five years ago, I introduced into your seas a plankton of a variety called neptune's shawl, colonies of which now creep up your beaches and float upon the waves above your continental shelves. When dead and decayed, neptune's shawl can serve as a substitute for petrochemicals in your food factories.

"Jersee-pods might be looked upon as a nonaquatic analogue to neptune's shawl. The pods produce a fluid with certain biochemical similarities to raw crude oil. It is similar enough so that your food factories, after a minimal retooling easily accomplished by a world of your undoubted technological expertise, can make efficient use of it for processing into foodstuffs. Yet I must stress that you cannot simply plant these pods here and there as a supplement to your present crops. For maximum benefit, they must be planted universally, entirely supplanting the omni-grain, neograss, and other flora on which you have become accustomed to rely for provender."

A slender woman in the back stood up on her chair to be seen above the throng. "Tuf, who are you to tell us that we have to give up real food?" she screamed, anger in her tone.

"I, madam? I am but a humble ecological engineer engaged in the practice of his profession. It is not for me to make your decisions. My task, so obviously thankless, consists of presenting you with the facts and suggesting certain possible remedies which might be efficacious, however unpleasant. Thereafter, the government and people of S'uthlam must make the ultimate determination as to what course to follow." The audience was getting unruly again. Tuf raised a finger. "Quiet, please. I will soon conclude my presentation."

The picture on the telescreen changed once more. "Certain species and ecological strategies that I introduced five years ago, when first employed by S'uthlam, can and should remain in place. The mushroom and fungus farms beneath your undercities should be maintained and expanded. I have several new varieties of fungus to demonstrate to you. More efficient methods of farming the seas are certainly possible, methods which include use of the ocean floor as well as its watery ceiling. The growth of neptune's shawl can be stimulated and encouraged until it covers every square meter of S'uthlam's salt-water surface. The snow-oats and tunnel-tubers you have in place remain optimal food species for your frigid arctic regions. Your deserts have been made to bloom, your swamps have been drained and made productive. All that might be done on land or sea is being attempted. There remains only the air. I therefore propose the introduction of a complete living ecosystem into your upper atmosphere.

"Behind me, upon the screen, you see the final link in this new food chain I propose to forge for you. This huge dark creature with the black triangular wings is a Claremontine wind-rider, also called the *ororo*, a

distant analogue to better-known species such as the black banshee of High Kavalaan and the lashtail manta of Hemador. It is a predator of the upper atmosphere, a glider and hunter, born aloft, a creature of the winds that lives and dies in flight, never touching land or sea. Indeed, once having landed, such wind-riders soon perish, as it is impossible for them to go aloft again. On Claremont, the species is small and lightweight, its flesh reported to be tough and leathery. It consumes any birds with the misfortune to venture into the altitudes it hunts, and also several varieties of airborne microorganisms, flying fungi, and windborne slime-molds that I also propose to introduce into your upper atmosphere. I have produced a genetically tailored wind-rider for S'uthlam, with a wing-span of some twenty meters, the ability to descend almost to treetop level, and nearly six times the body mass of the original. A small hydrogen sac behind the sensory organs will enable the beast to maintain flight despite this greater body weight. With your aircars and fliers, you will have no difficulty hunting and killing the wind-riders, and you will find them an excellent source of protein.

“In the interests of full and complete honesty, I must add that this ecological modification will not be without cost. The microorganisms, fungus, and slime-molds will reproduce very quickly in your skies, having no natural enemies. The upper stories of your taller residential towers will be covered with mold and fungus, and more frequent cleaning will be required. Most of the native S'uthlamese birds and those species you brought to this world from Tara and Old Earth will die out, displaced by this new aerial ecosystem. Ultimately, the skies themselves will darken, you will receive significantly less sunlight, and your climate will undergo a permanent change. I do not project this happening for some three hundred years, however. Since you face disaster in a far shorter time if nothing is done, I continue to recommend the course of action I have outlined.”

The newsfeed reporters leaped to their feet and began shouting questions. Tolly Mune was slumped and scowling. First Councillor Cregor Blaxon was sitting quite still, staring straight ahead with a fixed smile on his sharp, thin face, his eyes glassy.

“A moment, if you will,” Haviland Tuf said to the turmoil. “I am about to conclude. You have heard my recommendations and seen the species with which I intend to redesign your ecology. Now, attend. Assuming your High Council does indeed opt to deploy the meatbeast, the jersee-pod, and the ororo in the ways that I have outlined, the Ark's computers project a significant improvement in your food crisis. Observe.”

All eyes went to the telescreen. Even Tolly Mune craned her head around, and First Councillor Cregor Blaxon, smile still firmly in place, rose from his seat and faced the screen boldly, his thumbs hooked into his pockets. A grid flashed into place, a red line chased a green line across the display, and dates lined up along one axis, population figures along the other.

The noise died.

The silence lingered.

Even way to the back, they heard Cregor Blaxon when he cleared his throat. “Ah, Tuf,” he said, “this must be wrong.”

“Sir,” said Haviland Tuf, “I assure you, it is not.”

“It's, ah, the before, isn't it? Not the after.” He pointed. “I mean, look, all that eco-engineering, growing nothing but these pods, our seas covered with neptune's shawl, the skies growing darker with flying food, meat-mountains in every cellar.”

“Meatbeasts,” Tuf corrected, “although I concede that ‘meat mountains’ has a certain flair. You have a gift for colorful language and memorable terminology, First Councillor.”

“All this,” Blaxon said doggedly, “is pretty radical, Tuf. We have a right to expect radical improvement, I'd say.”

A few loyalists began cheering him on.

“But this,” the First Councillor concluded, “this projection says, ah, maybe I’m reading it wrong.”

“First Councillor,” said Haviland Tuf, “and people of S’uthlam, you are reading it correctly. If you adopt every one of my suggestions, you will indeed postpone your day of catastrophic reckoning. Postpone, sir, not forestall. You will have mass famine in eighteen years, as per your current projection, or in one hundred nine, as this projection indicates, but you will most certainly have mass famine.” He raised a finger. “The only true and permanent solution is to be found not aboard my *Ark*, but in the minds and loins of each individual S’uthlamese citizen. You must practice restraint and implement immediate birth control. You must stop your indiscriminate procreation at once!”

“Oh, no,” groaned Tolly Mune. But she had seen it coming, and she was on her feet, moving toward him and shouting for a security cordon, well before all hell broke loose.

“Rescuing you is getting to be a puling habit,” Tolly Mune said, much later, when they had returned to the safety of Tuf’s shuttle *Phoenix*, in its berth way out along spur six. Two whole squads of security, armed with nerveguns and tangles, stood outside the ship, keeping the growing and unruly crowd at bay. “You have any beer?” she asked. “I could use one. Puling hell.” It had been a harrowing run back to the ship, even with guards flanking them to either side. Tuf ran with a strange awkward lope, but he had surprising speed, she had to admit. “How are you doing, anyway?” she asked him.

“A thorough scrubbing has removed most of the spittle from my person,” Haviland Tuf said, folding himself into his seat with dignity. “You will find beer in the refrigerated compartment under the gaming-board. Make free with it, if you will.” Dax began to scale Tuf’s leg, digging tiny claws into the fabric of the pale blue jumpsuit into which he had changed. Tuf reached down with a large hand and helped him up. “In the future,” he said to the cat, “you shall accompany me at all times, so that I will have ample warning of the onset of such demonstrations.”

“You’d have had ample goddamned warning this time,” said Tolly Mune, pulling out a beer, “if you’d told me that you intended to condemn our beliefs, our church, and our whole puling way of life. Did you expect they’d give you a medal?”

“A rousing hand of applause would have been sufficient.”

“I warned you a long time ago, Tuf. On S’uthlam, it’s not popular to be anti-life.”

“I decline to be thus labeled,” said Tuf. “I stand squarely in favor of life. Indeed, daily I create life in my cloning vats. I have a decided personal aversion to death, I find entropy distasteful, and if invited to the heat death of the universe, I would most certainly make other plans.” He raised a finger. “Nonetheless, Portmaster Mune, I said what had to be said. Unlimited procreation as taught by your Church of Life Evolving and practiced by the majority of S’uthlamese, yourself and your fellow zeros excluded, is irresponsible and foolish, producing as it does a geometric population increase that will most assuredly pull down your proud civilization.”

“Haviland Tuf, prophet of doom,” the Portmaster said with a sigh. “They liked you better as a rogue ecologist and a lover.”

“Everywhere I visit, I find heroes to be an endangered species. Perhaps I am more aesthetically pleasing when mouthing reassuring falsehoods through a filter of facial hair in melodramatic vidshows reeking of false optimism and post-coital complacency. This is a symptom of a great S’uthlamese affliction, your blind preference for things as you would have them rather than as they are. It is time that your world looked upon naked truth, be it my hairless face or the near certainty of famine in your future.”

Tolly Mune swallowed some beer and stared at him. “Tuf,” she said, “you remember what I said five years ago?”

“As I recall, you said a great many things.”

“At the end,” she said impatiently, “when I decided to help you escape with the *Ark* instead of helping Josen Rael take it from you. You asked me why, and I explained my reasons.”

“You said,” Tuf stated, “that power corrupts, that absolute power corrupts absolutely, that the *Ark* had already corrupted First Councillor Josen Rael and his associates, and that I was better fitted to retain possession of the seedship because I was an incorruptible man.”

She gave him a wan smile. “Not quite, Tuf. I said I didn’t think there was such a thing as an incorruptible man, but if there was, you were the item.”

“Indeed,” said Tuf, stroking Dax. “I stand corrected.”

“Now you’re making me wonder,” she said. “You know what you just did, back there? For starters, you toppled another government. Creg can’t survive this. You told the whole world he’s a liar. Maybe that’s fair enough; you made him, now you unmade him. First Councillors don’t seem to last long when you come calling, do they? But never mind that. You also told, oh, some thirty-odd billion members of the Church of Life Evolving that their most deeply held religious beliefs are so much bladder bloat. You as much as said that the entire basis of the technocratic philosophy that has dominated council policy for centuries is mistaken. We’ll be lucky if the next damned election doesn’t bring the expansionists back in, and if that happens, it means war. Vandeen and Jazbo and the other allies will not tolerate another expansionist government. You probably ruined me, too. Again. Unless I’m even faster on my goddamned feet than I was last time around. Instead of a star-crossed lover, I’m now the sort of gnarly old bureaucrat who likes to lie about her sexual escapades, and I helped Citizen Anti-Life, too.” She sighed. “You seem determined to see me in disgrace. But that’s nothing, Tuf. I can take care of myself. The main thing is, you took it upon yourself to dictate policy to forty-plus billion people, with only the vaguest conception of the consequences. By what authority? Who gave you the right?”

“I would maintain that any human has the right to speak the truth.”

“And the right to demand a worldwide all-net newsfeed to speak it on? Where did that puling right come from?” she said. “There are several million people on S’uthlam who belong to the zero faction, me included. You didn’t say much that we haven’t said for years. You just said it louder.”

“I am aware of this. It is my hope that the words spoken this evening, no matter how bitterly they were received, will ultimately have a beneficial effect upon S’uthlamese politics and society. Perhaps Cregor Blaxon and his technocrats will grasp the truth that no true salvation can be found in what he calls Tuf’s Flowering and what you once referred to as ‘the miracle of loaves and fishes’. Perhaps from this point on, policies and opinions will be changed. Perhaps your zero faction may even triumph in the next election.”

Tolly Mune scowled. “That’s damned unlikely, and you should know it. And even if the zero faction won, the question arises as to what the hell we could do.” She leaned forward. “Would we have the right to *enforce* population control? I wonder. Never mind about that, though. My point is that you don’t have any damned monopoly on truth. Any zero could have given your damned speech. Hell, half the damned technocrats know what the ledger looks like. Creg’s no fool. Neither was poor Josen. What allowed you to do that was *power*, Tuf. The power of the *Ark*. The help you can give us, or withhold, as you choose.”

“Indeed,” said Tuf. He blinked. “I cannot take issue with you. The sad truth of history has always been that the unreasoning masses follow the powerful, and not the wise.”

“And which are you, Tuf?”

“I am but a humble—”

“Yes, yes,” she snapped, “I know, a goddamned humble ecological engineer. A humble ecological engineer who has taken it on himself to play prophet. A humble ecological engineer who has visited S’uthlam exactly twice in his life, for a total of maybe a hundred days, and yet feels competent to topple

our government, discredit our religion, and lecture forty-odd billion strangers about how many puling children they ought to have. My people may be stupid, they may be shortsighted, and they may be blind, but they are still my people, Tuf. I don't think I entirely approve of you arriving here and trying to remake us according to your own enlightened values."

"I deny this charge, madam. Whatever my personal standards might be, I do not seek to impose them upon S'uthlam. I merely took it upon myself to elucidate certain truths, and to make your population aware of certain cold, hard equations, the sum of which is assuredly disaster, and cannot be changed by beliefs, prayers, or melodramatic romances on your vidnets."

"You're being paid—" Tolly Mune started.

"Insufficiently," Tuf interrupted.

She smiled despite herself. "You're being paid for ecological engineering, Tuf, not for religious or political instruction, thank you."

"You are most welcome, Portmaster Mune." He made a steeple of his hands. "Ecology," he said.

"Consider the word, if you will. Meditate upon its meaning. An ecosystem might be likened to a great biological machine, perhaps. If this analogy is pursued, humanity must be seen as part of the machine. No doubt an important part—an engine, a key circuit—but in no case apart from the mechanism, as is often fallaciously assumed. Ergo, when one such as myself re-engineers an ecology, he must by necessity refit as well the humans who inhabit it."

"Now you're giving me a chill, Tuf. You've been alone in this ship for too long."

"This is an opinion I do not share," said Tuf.

"People aren't old pulse-rings, or blast-tubes to be recalibrated, you know."

"People are more complex and recalcitrant than any simple mechanical, electronic, or biochemical component," Tuf agreed.

"That's not what I meant."

"The S'uthlamese are especially difficult," Tuf said.

Tolly Mune shook her head. "Remember what I said, Tuf. Power corrupts."

"Indeed," he said. In this context, she hadn't a clue as to what it meant.

Haviland Tuf rose from his seat. "My stay here shortly will be at an end," he said. "At this very instant, the *Ark*'s chronowarp is accelerating the growth of the organisms in my cloning tanks. The *Basilisk* and *Manticore* are being prepared to effect delivery, on the assumption that Cregor Blaxon or his successor will ultimately decide to accept my recommendations. I would estimate that within ten days S'uthlam will have its meatbeasts, jersey-pods, ororos, etcetera. At that point I shall take my leave, Portmaster Mune."

"Abandoned by my star-bound lover once again," Tolly Mune said crossly. "Maybe I can make something out of that."

Tuf looked at Dax. "Levity," he said, "flavored with bitterness." He looked up again, and blinked. "I believe I have rendered great service to S'uthlam," he said. "I regret any personal distress that my methods have caused you. Such was not my intent. Permit me to make some small redress."

She cocked her head and looked at him hard. "How are you going to do that, Tuf?"

"A trifling gift," said Tuf. "Aboard the *Ark*, I could not help but notice the affection with which you treated the kittens. Nor did it go entirely unreciprocated. I would like to give you two of my cats, as a token of my esteem."

Tolly Mune snorted. "Hoping that stark terror will keep the security men away when they come to arrest

me? No, Tuf. I appreciate the offer and I'm tempted, really, but vermin are illegal in the web, remember? I couldn't keep them."

"As Portmaster of S'uthlam, you have the authority to change the applicable regulations."

"Oh, right, and wouldn't that look great? Anti-life and corrupt, too. I'd be real puling popular."

"Sarcasm," Tuf informed Dax.

"And what happens when they replace me as Portmaster?" she said.

"I have every faith in your ability to survive this political tempest, even as you weathered the last," said Tuf.

Tolly Mune laughed raucously. "Good for you, but no, really, it just won't work."

Haviland Tuf was silent, his face blank of all expression. Finally he raised a finger. "I have devised a solution," he said. "In addition to two of my kittens, I will give you a starship. As you know, I have a surfeit of them. You may keep the kittens there, aboard ship, technically outside the jurisdiction of the Port of S'uthlam. I will even leave you with sufficient food for five years, so that it cannot be said that you are giving so-called vermin calories needed by hungry human beings. To further bolster your flagging public image, you may tell the newsfeeds that these two felines are hostages against my promised return to S'uthlam five years hence."

Tolly Mune let a crooked smile creep across her homely features. "That might work, damn it. You're making this hard to resist. A starship, too, you say?"

"Indeed."

She grinned. "You're too convincing. All right. Which two cats, now?"

"Doubt," said Haviland Tuf, "and Ingratitude."

"There's a pointed comment in that, I'm sure," Tolly Mune said. "I won't pursue it. And five years' worth of food?"

"Sufficient until the day, five years hence, when I return again to repay the remainder of my note."

Tolly Mune looked at him—the long, still, white face, the pale hands folded neatly atop his bulging stomach, the duck-billed cap resting on his bald head, the small black cat in his lap. She looked at him long and hard and then, for no particular reason she could name, her hand trembled just a little, and beer spilled from her open glass onto her sleeve. She felt the cold wetness soak into her shirt and trickle down her wrist. "Oh, joy," she said. "Tuf and Tuf again. I can hardly wait."